

**WE CLAIM:**

1. Method of the wave biomechanotherapy using waves formed due to a wave-type travel of an elastic medium presses against a human body, *distinguishing itself* in that the therapy is performed with a combination of heat, light and mechanical waves which are sequential and parallel combinations of longitudinal and transverse modulated solitary waves of length from 0.005 to 0.1 m propagating along the body with speed from 0.01 to 12 m/s, where the longitudinal solitary waves are formed on the body due to an impulsive travel of separate vibratodes along the body surface, the transverse solitary waves are formed on the body due to an impulsive travel of separate vibratodes at the right angle to the body surface and the vibratodes are interconnected with a controlled link and act on a human body with temperature from 0 to 90°C, specific pressure from  $0.5 \cdot 10^5$  to  $4 \cdot 10^5$  Pa, shear thrust from 0.1 to 100 N and duration from 1 min to 10 hours.

2. Method of the wave biomechanotherapy as per para. 1, *distinguishing itself* in that the modulating oscillations of a solitary wave are impulses with frequency from 0.004 to 1 Hz and the on-off time ratio equaling to the number of vibratodes participating in the waves formation, and the carrier oscillations are a sequence of impulses with frequency from 1 to 40 Hz and the on-off time ratio from 1.1 to 6, in relation to which the frequency modulation is performed, for example, by a sinusoidal signal with the modulation frequency varying from 0.004 to 1 Hz and the frequency deviation varying from 0.001 to 40 Hz.

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3. Method of the wave biomechanotherapy as per para. 1, *distinguishing itself* in that each vibratode is equipped with a radiator connected with a fiber optic light guide to the internal laser light source with the illumination intensity synchronized in phase with thermomechanical impulses oscillations, and all sources in total are used to create a laser light solitary wave on the body surface.

4. Method of the wave biomechanotherapy as per para. 1, *distinguishing itself* in that in the process of therapy air of temperature from 0 to 90°C is supplied into the vibratodes.